

Siddiqui discloses a two-button mouse with a depressible wheel. Siddiqui does not show or suggest a thumb button.

Goldstein discloses a mouse with a single side button located near the top of the mouse. Goldstein also discloses a resting surface for supporting the ring finger of the hand. Goldstein does not show or suggest two side buttons or a supporting surface for the little finger of the hand.

The present application includes independent claims 1, 7, 14, 18, and 25. The patentability of each of these claims is discussed separately below.

Independent claim 1 and claims 3, 5, and 6

Independent claim 1 is directed toward a mouse that includes a thumb pinching area located on the side of the mouse near the mouse's bottom surface. The mouse also include two side buttons that are located above the thumb pinching area in a direction away from the mouse's bottom surface.

None of the cited references show such a mouse. In particular, none of the references show two buttons located above a thumb pinching area.

In the Office Action, it was asserted that buttons 36 and 40 of Zenz are located above a thumb pinching area 64. However, as shown in FIG. 3 of Zenz, thumb pinching area 64 and buttons 36 and 40 are the same distance from the bottom surface of the mouse. As such, buttons 36 and 40 are not above thumb pinching area 64, but instead are level with thumb pinching area 64.

Although Goldstein shows a button located above the thumb pinching area, it does not show two buttons located above the thumb pinching area. As such, the invention of claim 1 is distinct from Goldstein. In addition, it would not be obvious to modify Goldstein to add a second button because Goldstein states that the side button is positioned such that the user can

activate it with either their thumb or their index finger. It is not clear how a second side button could be added while still allowing the user to activate the side buttons with both their thumb and index finger. Because of this, those skilled in the art would not be motivated to add an additional button to the Goldstein mouse.

Since none of the cited references show two buttons located above a thumb pinching area, their combination does not render the invention of claim 1 obvious. As such, claim 1 and claims 3, 5, and 6, which depend therefrom, are patentable over the cited art.

Independent claim 7 and claims 8-12

Independent claim 7 is directed toward a mouse with a thumb gripping position and at least one button that is between the user's thumb and the user's index finger when the user's thumb is in the thumb gripping position. The at least one button has a surface that is substantially level with a surface of the thumb gripping position.

None of the cited references show a mouse with such a side button. This can be seen in Fig. 3C of Zenz where it clear that there is no side button between the user's thumb and the user's index finger. Similarly, FIG. 1D of Siddiqui shows that there is no button between the user's thumb and the user's index finger when the user's thumb is in the gripping area.

Although Goldstein does show a side button between a user's thumb and index finger, it does not show a side button that is substantially level with a surface of the thumb gripping position. Instead, the side button in Goldstein appears as a bump on the surface of the mouse as can be seen clearly in FIGS. 11, 12 and 13.

Since none of the cited references show a side button that is substantially level with a thumb gripping position, their combination does not show or suggest the invention of claim 7. As

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such, claim 7 and claims 8-12, which depend therefrom, are patentable over the cited art.

Independent claim 14 and claims 16 and 17

Independent claim 14 provides a mouse with a convex support for the user's ring finger and little finger. In claim 14, the convex support is separate from a secondary button on the mouse.

The mouse of claim 14 is not obvious from the cited art. In particular, there is no suggestion or motivation for modifying the cited references to form a mouse with a convex support for the user's ring finger and little finger where the support is separate from a button on the mouse.

For example, there is no motivation to modify the Zenz mouse to add a ring finger support surface that is separate from a button on the mouse. In Zenz, the user's ring finger is supported on a button so that the user can easily actuate the button with their ring finger. If a support were provided apart from the button, the user's ring finger would be in an unnatural position when it was resting on the support or when it was actuating the button. As shown in Goldstein, those skilled in the art avoid designs that place the hand in unnatural positions because these positions strain the user's hand and can cause soft-tissue injuries. Because of this, those skilled in the art would not be motivated to modify the Zenz mouse to form the mouse of claim 14.

Similarly, those skilled in the art would not be motivated to modify Goldstein's mouse to form a mouse with a little finger support because Goldstein emphasizes that the little finger is to be supported by the working surface and not by the mouse. In particular, Goldstein notes at column 14, lines 32-35 that the Goldstein mouse was specifically designed to allow "continuous pronation relief with the resting grip position and particularly the side grip position." As discussed further in

Goldstein, both the resting grip position and the side grip position place the little finger on the working surface. (See column 9, lines 35-40). Because Goldstein specifically states that a mouse should provide a grip position where the user's little finger is supported by the working surface, it would not be obvious to modify Goldstein to add a little finger support area on the mouse.

Lastly, Applicants note that even if the mice in the cited references were combined, the resulting mouse would have a concave support for the user's little finger since that is the only support shown for a little finger in any of the references.

Since the invention of claim 14 provides a convex support and not a concave support, the invention of claim 14 is distinct from the cited combination.

Because there is no motivation to modify any of the cited mice to form the mouse of claim 14, and because the combination of references would not produce the mouse of claim 14, claim 14 and claims 16 and 17, which depend therefrom, are patentable over the cited art.

Independent Claim 18

Independent claim 18 is similar to claim 14 in that it provides a ring finger contact area and a little finger contact area that are both convex, where the ring finger contact area is separate from a secondary button. As discussed above, providing such contact areas on a mouse is not obvious from Goldstein, Zenz and Siddiqui. As such, claim 18 is patentably distinct from the cited art.

Independent claim 25 and claims 26-31

Independent claim 25 provides a mouse with a wheel having at least fifty ribs. None of the cited references show a mouse with such a wheel. In particular, none of the references show a mouse with at least fifty ribs.

Note that the number of ribs on the wheel of the present invention provides an advantage to the mouse of claim 25.

In particular, it provides increased friction between the user's finger and the wheel thereby making it easier for the user to control the wheel.

None of the cited references discuss ribs on their wheel. As such, none of the references show or suggest the mouse of claim 25. Therefore, claim 25 and claims 26-31, which depend therefrom, are patentable over the cited art.

Conclusion

In light of the above remarks, reconsideration and allowance of claims 1, 3, 5-12, 14, 16-18, and 25-31 is respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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